

## 11. Dynamic Demographic Data Concept Paper.doc

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**Date:**

July 11, 2007

**Project Name:**

Dynamic Demographic Data on the Web

**Is this project in support of a program designated as an Iowa Great Place, pursuant to section 303.3c?:**

No

**Requesting Agency:**

State Library of Iowa

**Project Point(s)-of-Contact:**

Beth Henning, State Data Center Coordinator, 515-281-4350

**Project Sponsor:**

Mary Wegner, State Librarian, 515-281-4105

**Goal:**

To create a database with a dynamic Web-based user interface that makes it easy to find, use and visualize data about Iowa's population and demographic trends

**Project Purpose:**

- ◆ Design and execute a dynamic data user interface on the State Data Center Web site to allow demographic data users to manipulate data and create customized data views
  - Select and combine dimensions, such as geography, years, and specific demographic, social, economic, or housing attributes
  - Sort and rank results
  - Visualize data in maps and charts
  - Specify output file formats
  - Access metadata and data notes online
- ◆ Design and execute a point-and-click administrative interface to allow State Data Center staff to maintain the Web site without adding new staff
  - Use data presentation templates and style sheets, not custom coding
- ◆ Convert data on the existing Web site to a database with the new user and administrative interfaces
- ◆ Train two staff members to use the administrative interface

**Background:**

The mission of the State Data Center program is to increase the availability of census data in Iowa and help people use it. To that end, the State Data Center maintains a Web site of demographic, social, economic, and housing data about Iowa, and responds to requests for data. The State Data Center Web site attracts more than 300,000 requests each year. Users include state and local government officials who need data for policy decisions, performance benchmarks, and revenue and cost estimating; businesses making marketing and site location decisions; non-profits applying for grant funding; scientists, educators and students doing research; and the general public who use data to promote and improve their communities.

In August 1999 the State Data Center went live with its first Web site, presenting data in fewer than 50 static Excel files. In 2001 the Web site was redesigned to accommodate the large amount of data released after the 2000 decennial census. Currently, the State Data Center Web site hosts more than 7,000 files. With full implementation of the annual American Community Survey (ACS) in 2010, the Census Bureau will double the number of data files it releases each year, producing the equivalent of a decennial census release every year.

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Although the amount of information on the Web site is expanding, production processes and presentation technology for the site remain as they were in 2001. Every week the State Data Center staff of two people sifts through new data releases to select those characteristics that they believe to be of most interest to Iowa data users. They manually combine characteristics to create static data tables in Excel and Adobe, manually link each file to a limited number of pre-defined subject headings, and publish the information on the Web using FrontPage. As of late 2006, FrontPage is no longer supported by Microsoft. However, the State Data Center data pages remain in FrontPage because of the difficulties in migrating the data to the content management system used by the rest of the State Library.

The State Data Center Web site allows data users to browse subject headings to find static data tables that most closely match their needs. Files may be opened and downloaded in Excel or Adobe Acrobat. Users cannot quickly view the information as HTML pages nor can they search by keyword or manipulate the data once they find it, for example, by selecting a subset of counties instead of viewing all 99, creating rankings and totals, or combining the years or characteristics of their choice into customized tables. While the site offers a limited number of static maps, it does not allow users to create their own maps.

Today the line between information consumers and information producers has blurred--data users expect to be able to interact with Web sites. In a focus group conducted in the fall of 2006, data users were enthusiastic about the data and services provided by the State Data Center, but they also expressed a desire for more features on the State Data Center Web site, including (1) "a true online database to be able to manipulate the data"; (2) the ability to "select a combination of counties and have the data total up for just those counties"; and (3) "GIS mapping capability".

### **Expected Results in this Project:**

- ◆ A dynamic user interface will answer data users' needs to manipulate data, create customized reports, and visualize Iowa population trends using charts, graphs, and maps. It will replace an aging, inflexible application which is no longer supported by the vendor.
- ◆ A point-and-click administrative interface will allow the State Data Center staff to provide maximum flexibility to data users without writing customized code to manage daily tasks on the Web site.
- ◆ Vendor assistance in converting the old Web site to a database is essential to prevent disruption in State Data Center services during the transition. The small State Data Center staff does not have the resources to build a new Web site while simultaneously maintaining the old one.
- ◆ Training will allow the State Data Center staff to be self-sufficient in managing the Web site, a vital requirement to ensure the timely release of data.

**Request:** *(include dollar amount and description of what will be purchased - i.e. services, hardware, software)*

This request is for \$20,000 to contract with an IT consultant to define the scope of the project. No funds will be used for State Library staff or overhead costs.

**Resources Being Contributed:** *(people or funds being contributed to the project by the sponsoring agency- include role/% of time or amount in dollars)*

The Scope Analysis is the top priority of two State Library of Iowa staff members, Beth Henning and Gary Krob, who will work with the consultant to define the scope of the project.

### **Interested Parties/Recipients of this Service:**

- ◆ Policy-makers, including state and local government officials
  - ◆ Businesses and entrepreneurs
  - ◆ Libraries and their customers
  - ◆ Non-profit organizations
  - ◆ Researchers, educators and students
  - ◆ General public and the media
  - ◆ State Data Center network agencies
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